# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,610	10/15/2003	Robert T. Brooks	EH-10796 (02-806)	5107
	7590 02/09/2007 I A POINTE P C	EXAMINER		
BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510			KRAUSE, JUSTIN MITCHELL	
			ART UNIT	PAPER NUMBER
	,		3682	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		02/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/685,610	BROOKS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Justin Krause	3682				
- The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 11/21/06.						
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	•					
6)⊠ Claim(s) <u>1-20</u> is/are rejected.	· · · · · · · · · · · · · · · · · · ·					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attach == ant/c)						
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  4) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) U Other:						

Art Unit: 3682

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

Claims 1-13 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The examiner does not understand what material "electro-graphitic carbon" is. It is not adequately defined in the specification to permit one of ordinary skill in the art to make or use the claimed invention. No characteristics of the material are described to distinguish it from any other carbon-based compound and it does not appear to be a recognized term of art.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-3, 7-9 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Naudet et al (US Patent 4,706,354).

Art Unit: 3682

Naudet discloses a wear resistant ID bushing (6) comprising carbon or graphite (Col 3, line 56) having a linear chamfer (see fig 2, fig 5) about an edge of the ID bushing extending at a chamfer angle.

While the intended use of the device to be used in a turbine engine has minimal patentable weight, the examiner notes that the device of Naudet is for use in a turbine engine.

Regarding claim 13, Naudet discloses an ID bushing (6), a trunnion (5) and an ID shroud (7), wherein the ID bushing is located in contact with the trunnion and said ID shroud.

Regarding claims 14-20, there is reason to believe, based on the similarity of (material, structure, etc.), that the functional limitation(s) of the bushing being capable of operation at a temperature of at least 850 deg. F or 1050 deg. F, may be (an) inherent characteristic(s) of Naudet. In accordance with *In re Best*, 562 F.2d 1252, 195 USPQ 430, 433 (CCPA 1977):

[W]here the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

This "burden of rebutting [may be of] the PTO's reasonable assertion of inherency under 35 USC 102, or of prima facie obviousness under 35 USC 103" (195 USPQ at 432).

Art Unit: 3682

Accordingly, the burden is placed upon the applicant to prove that the limitation(s) in question is/are not (an) inherent characteristic(s) of the reference disclosure.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-6 and 10-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Naudet et al (US Patent 4,706,354) in view of Official Notice.

Naudet discloses all of the claimed subject matter as described above, but does not disclose a specific angle for the chamfer.

It is well known in the art to set the angle of a chamfer at approximately 45 degrees, both by definition and for the purposes of simplifying assembly by creating guiding surface to insert a shaft into a bore and to prevent damage to the sleeve due to misalignment between parts causing a square edge to crack or chip, and to prevent damage to the surface of the shaft.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the chamfer approximately 45 degree, since the examiner takes official notice of the fact that chamfers of approximately 45 degrees were well

Art Unit: 3682

known at the time the invention was made and employed for the purpose of simplifying assembly and preventing damage to both the sleeve and trunnion.

#### Response to Arguments

Applicant's arguments filed November 21, 2006 have been fully considered but they are not persuasive.

Applicant argues that the prior art uses graphite filled polyimide and there is no reason to believe that Naudet is anything more than this. The examiner disagrees. There is no suggestion in Naudet that it is anything other than the carbon or graphite bushing as recited in the reference. Since it is unknown how electro-graphitic carbon modifies carbon and applicants response lacks any explanation of how electro-graphitic further modifies carbon, Naudet anticipates the claimed invention.

#### Conclusion

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3682

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMK 216/07

> Thomas R. Hannon Primary Examiner

Page 6